

TECHNICAL DIVISION MONTHLY PROGRESS REPORTS (1955 ONLY)

<u>M No.</u>	<u>Date</u>	<u>% over 0.1 mg/m3</u>				<u>avg EFPC (mg/L)</u>
		<u>A2</u>	<u>B4</u>	<u>A5</u>	<u>A4</u>	
	(12-54)			--		(0.14)
M-1	1-55	65	19	88		0.15
M-2	2-55	86	28	64		0.59
M-3	3-55	66	34	87		1.09
M-4	4-55	52	36	52		1.48
M-5	5-55	25	38	47	--	1.98
M-6	6-55	20	29	51	42	1.93
M-7	7-55	29	35	74	87	1.06
M-8	8-55	15	32	60	82	0.82
M-9	9-55	37	22	56	86	1.3 (read off graph)
M-10	10-55	43	16	48	76	0.5 (from graph)
M-11	11-55	45	18	48	73	0.75 (graph)
M-12	12-55	21	34	23	80	0.7 (graph)
M-13	1-56	26	28	17	62	0.3 (graph)

Jan 1955- Hg air monitoring on a routine basis was begun in Alpha-5. Building 9202 was being renovated.

Apr 1955- The Y-12 Creek Level Monitor shows min and max discharges of 16 and 71 cfs.

May 1955- Hg concentrations are above 0.1 mg/m3 in the absorber, cascade, feed preparation and feed storage areas. There is also Hg contamination in the pump and equipment cleaning areas.

June 1955- Hg air sampling was extended to the Alpha-4 plant.

July 1955- Additional roof ventilators are being installed on Alpha-5 absorber roofs. The flow of the roof ventilators in the cascade areas will be reversed to discharge outside air down into the cascade areas.

Aug 1955- Downdraft ventilations will be added to the area where Moyno pumps are assembled and disassembled on tables in Alpha-5.

Sept 1955- Trace amounts of Hg are being introduced into Poplar Creek even though the building waste water passes into a settling basin.

Dec 1955- In addition to the Hg which is lost in the floor drain water, rather large amounts of Hg are tied up in filter cakes and other sludges... The largest amount of Hg is probably represented by the cake from the plate and frame filters which filter the backwash from the anthrafilt filters in the evaporator circuit.

In 1956, 280,000 air samples were taken.

Jan 1956- Alpha 5 is being deconned to reduce Hg contamination. Control of the floor [Hg contamination as fine droplets] will go a long way toward control of the whole problem. Engineering was started for preliminary stripping of 9202 and process flow sheets for the New Colex Pilot Plant. An increased number of air changes will result from the ventilation system redesign now underway, with air changes up to 10 per hour in the absorber areas of Alpha-4.

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M-14 3rdQ 1959- none

M-15 2ndQ 1963- The detection limit for X-ray fluorescence is 0.5 $\mu\text{g/g}$ Lithium. The detection limit for the dithizone method is 0.02 $\mu\text{g/g}$ Li.